WSDOT Status Regarding Westside Design Options for SR 520

Since January, WSDOT has been looking at a number of design and refinement options on both the Eastside and Westside in order to ensure that the SR 520 project corridor is designed in a way that works both for the traveling public and the adjacent communities.

The Montlake community in Seattle also had creative ideas regarding a high-level bridge option through the Portage Bay and Montlake areas. In reviewing these new ideas, there are many common goals that WSDOT, its partner agencies and the local community are hoping to achieve:

- Reduce the footprint of the 6-Lane Alternative through Portage Bay and Montlake
- Improve transit connections to Sound Transit's proposed North Link station at Husky Stadium
- Improve access to transit and HOV
- Include context-sensitive design that enhances local communities
- Create a facility that is structurally feasible and cost effective
- Preserve options for future high capacity transit (HCT)

WSDOT is pleased that the options proposed by Montlake start with the assumption of the 6-Lane Alternative, with the Evergreen Point Floating Bridge being built first. The neighborhood recognizes the importance of preserving this vital facility and keeping it safe for the many thousands of people who use the bridge each day. This is WSDOT's first priority.

6-Lane Design Options in Seattle Area Moving Forward for Further Analysis

Throughout the development of these Westside options, WSDOT has worked closely with the Montlake and other Westside community leaders and consistently weighed new options against these common goals. WSDOT has held regular meetings to report on analysis completed and worked with these communities and our partner agencies to determine what options should move to the next stage of analysis.

Using all of the information and feedback received, WSDOT has determined that the following four design options for the 6-Lane Alternative should move forward for further analysis:

- **No Freeway Transit Stop at Montlake:** WSDOT will further explore the option of eliminating the Montlake Freeway Transit Stop as a way to reduce lane-width through Montlake and Portage Bay. WSDOT is working with Metro and Sound Transit to determine how this function could be served without the freeway transit stop.

- **High-Level Structure Across Portage Bay:** WSDOT has determined that a high-level bridge through Portage Bay and Montlake is possible. The option that WSDOT will explore further is a concrete structure type known as a box girder. It would include architectural features in the design to enhance the aesthetics of the structure. This option allows the inclusion of noise walls along Portage Bay—a key consideration to mitigate highway noise.

- **Pacific Street Interchange:** Another option is to remove the SR 520/Montlake interchange, and replace it with a new interchange at Pacific Street. This would narrow the 6-Lane Alternative across Portage Bay by eliminating the on-off ramps at Montlake. The Pacific Interchange would involve a new crossing of the Ship Canal from SR 520 to Pacific Street, with the connection point occurring adjacent to the Arboretum near Marsh Island. The Pacific Street Interchange could be applied to either a high-level structure or the currently planned 6-Lane Alternative at Portage Bay.

- **Second Montlake Bridge:** At the request of several partner agencies, WSDOT will further review the addition of a second bridge across the Montlake cut that would be similar in design to the current Montlake Bridge. This would be evaluated to determine whether it would offer improved transit operations through the Montlake corridor.

Design Options Eliminated

There were a number of other ideas evaluated that are not moving forward for further review. Two of these were the bridge types initially recommended by the Montlake community. Both the suspension bridge and cable-stayed bridge structures were eliminated for the following reasons:

- **Suspension Bridge:** WSDOT determined that a suspension bridge would not work for three primary reasons. First, suspension bridges need to travel in a fairly straight line, which was not possible within this curved corridor. Secondly, a connection could not be made to the new Pacific Street Interchange over Marsh Island. Finally, the size of the three to four support towers for a suspension bridge, at approximately 630’ in height, would have been nearly the height of the Space Needle and out of character with the surroundings.

- **Cable-Stayed Bridge:** WSDOT determined that a cable-stayed bridge has two primary fatal flaws that make it infeasible in this area. With such a high bridge, noise would reach a larger group of neighborhoods in the area than the currently planned structure. It is highly likely that noise walls could not be installed on this type of structure due to instability that would be created with wind. Without noise walls, it would be nearly impossible to mitigate noise issues. Similar to the suspension bridge, the size and scale of the support towers, at nearly 500' in height, was also an issue.

Next Steps

The options chosen for further analysis will be summarized in a technical appendix that will be released later this summer. WSDOT is pleased with the collaborative process that has been in place throughout the development of these new design options. WSDOT has worked closely with the Seattle Department of Transportation, the Seattle Parks Department, the University of Washington, Metro, Sound Transit, and adjacent community leaders on these options. More outreach is planned with other Seattle neighborhoods along the SR 520 corridor and Eastside jurisdictions in order to receive their feedback on these new developments. WSDOT looks forward to working closely with all of these groups and agencies to create the best possible solution for the SR 520 corridor.

For More Information

Visit the website at: www.wsdot.wa.gov/projects/SR520Bridge

Call the information line at: 206-781-3922

Send an email to: SR520Bridge@wsdot.wa.gov

Send a letter to:

SR 520 Bridge Replacement and HOV Project Office
Maureen Sullivan, Project Director
414 Olive Way, Suite 400
Seattle, WA 98101-1209